



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,847	12/21/2001	Thaylen K. Leany	03DV-9089	1175

7590

04/07/2006

John S. Beulick
Armstrong Teasdale LLP
Suite 2600
One Metropolitan Sq.
St. Louis, MO 63102

EXAMINER

MARSH, STEVEN M

ART UNIT

PAPER NUMBER

3632

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/026,847	Applicant(s) LEANY ET AL.	
	Examiner Steven M. Marsh	Art Unit 3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-20 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is the seventh office action for U.S. Application 10/026,847 for a Stud Mounting System filed on December 21, 2001. Claims 1-20 are pending.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 15, 2005 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims "at least one raised projection extending radially outward from at least one of said housing inner surface and said housing outer surface" However, it is not clear how one of Applicant's projections can extend radially. The plurality of projections extend radially, but one projection alone does not. That limitation has not been searched in claims 5-20.

Claim Rejections - 35 USC § 103

Claims 1, 2, and 4-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher in view of the Admitted Prior Art of Figure 1 (APA), in further view of Story, and in further view of Boede. With regards to claims 5-14, 16-18, and 20, Fisher discloses a motor comprising: a pair of endshields (58,60); a cylindrical housing (54) extending between the endshields and having inner and outer surfaces and a housing body extending between the inner and outer surfaces and comprising a thickness; and a stator-rotor assembly (72, 80) mounted within the housing, wherein the inner surface extends between the stator-rotor assembly and the outer surface. Fisher does not disclose the housing including a plurality of fasteners attached thereto and extending outwardly therefrom. The APA discloses a motor comprising a housing (12) including a plurality of fasteners (20) spaced circumferentially about the housing and extending outwardly therefrom for attachment to a support. It would have been obvious to one of ordinary skill in the art at the time of the present invention to have modified the housing of Fisher by providing a plurality of fasteners circumferentially spaced about the housing and extending outwardly therefrom because one would have been motivated to enable the motor to be attached within an application as taught by the APA (lines 3-6 of page 1 of the instant specification).

Fisher in view of APA does not disclose the fasteners extending outwardly through openings in the housing. Story discloses a motor mount comprising a plurality of fasteners (66), inherently including a head, secured to the inner

Art Unit: 3632

surface of the motor (by nuts as shown in figure 2) and extending outwardly therefrom through attachment points/openings (56). It would have been obvious to one of ordinary skill in the art at the time of the present invention to have modified the housing of Fisher by providing openings therein and extending the fasteners outwardly through the openings, wherein the fasteners are inherently positioned between interior rotating motor components and the outer surface, as an alternative means for securing the fasteners to the motor as taught by Story (col. 3, lines 27-38) because one would have been motivated to prevent accidental "breaking off" of the fasteners.

Fisher in view of APA in view of Story does not disclose the openings in the housing being included in raised projections extending outwardly from the housing. Boede discloses an apparatus comprising a housing member (47) having a body thickness and including a raised projection (58) defining a recess with an opening (56) therein, wherein a fastener (52) is attached to the inner surface of the recess, and wherein the raised projection has a thickness (at 57) that is approximately equal to the body thickness of the housing member (48 generally). It would have been obvious to one of ordinary skill in the art at the time of the present invention to have modified the housing of Fisher by providing raised projections, that extend outwardly from the housing and include openings therein for receipt of the fasteners because one would have been motivated to eliminate a mounting bolt head protrusion above the inner surface of the housing as taught by Boede (col. 4, lines 49-55).

Art Unit: 3632

Fisher in view of APA in view of Story and further in view of Boede does not teach the head of the fastener being substantially co-planar with the un-recessed portion of the inner surface of the housing. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the depth of the recess to be substantially equal to the height of the fastener head as is well known in the art such that the head is substantially co-planar with the un-recessed portion of the inner surface because one would have been motivated to reduce manufacturing costs by providing a recess having a height that sufficiently receives the fastener head and can be formed by using a limited amount of material and further since it has been held that a change in the size of a prior art device is a design consideration within the skill of the art. The specific thickness of the protrusion is also a matter of design preference that would have been obvious to one of ordinary skill in the art at the time of the present invention.

Regarding claims 1 and 2, the method steps recited therein are inherent to the apparatus as applied above. Regarding claims 4 and 19, Fisher in view of APA of Figure 1, in further view of Story, and further in view of Boede does not disclose the fasteners secured to the housing inner surface by a weld, crimp, or adhesive. However, it would have been obvious to one of ordinary skill in the art at the time of the present invention to have modified the motor mount by substituting a weld, crimp, or adhesive for nuts attached to the fasteners (see Fig. 2 of Story) since welds, crimps, adhesives, and nuts are well known for their use in the fastening art and the selection of any of these known equivalents to

Art Unit: 3632

secure the bolts to the housing surface would be within the level of ordinary skill in the art. Specifically regarding claim 4, the method step recited therein is inherent to the apparatus as applied above. Regarding claim 15, Fisher in view of APA, in further view of Story, and further in view of Boede does not disclose the raised projections spaced circumferentially 90 degrees about the housing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the housing of Fisher by spacing the projections at 90 degree intervals about the housing since it has been held that the optimization of proportions in a prior art device is a design consideration within the skill of the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961).

Claims 5-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art of Figure 1 (APA), in view of Story, and further in view of Boede. With regards to claims 5, 6, 8-11 and 13, the APA discloses a cylindrical motor housing (12) comprising an internal cavity housing rotating components of a motor (inherent; see pg. 3, lines 1-3 of instant specification); an inner surface (14) extending between the rotating components and the outer surface (16) of the housing, a housing body extending between the inner and outer surfaces and comprising a thickness, and a plurality of fasteners (20) spaced circumferentially about the housing and extending outwardly therefrom. The APA does not disclose the fasteners extending outwardly through openings in the housing. Story discloses a motor mount comprising a plurality of fasteners (66) secured to the inner surface of the motor (by nuts as shown in Figure 2) and extending

Art Unit: 3632

outwardly therefrom through attachment points/openings (56). It would have been obvious to one of ordinary skill in the art at the time of the present invention to have modified the housing of APA by providing openings therein and extending the fasteners outwardly through the openings, wherein the fasteners are inherently positioned between interior rotating motor components and the outer surface, as an equivalent alternative means for securing the fasteners to the motor as taught by Story (col. 3, lines 27-38).

The APA in view of Story does not disclose the openings in the housing being included in raised projections extending outwardly from the housing inner surface. Boede discloses a motor mount comprising a housing member (47) having a body thickness and including a raised projection (58) defining a recess with an opening (56) therein, wherein a fastener (52) is attached to the inner surface of the recess and wherein the raised projection has a thickness (at 57) that is approximately equal to the body thickness of the housing member (portion 48 generally). It would have been obvious to one of ordinary skill in the art at the time of the present invention to have modified the housing of APA by providing raised projections extending outwardly from the housing inner surface and including openings therein for receipt of the fasteners because one would have been motivated to eliminate mounting bolt head protrusion above the inner surface of the housing as taught by Boede (col. 4, lines 49-55). The APA in view of Story in view of Boede does not disclose the projections as having a thickness equal to the thickness of the housing body, but that is a matter of design

Art Unit: 3632

preference that would have been obvious to one of ordinary skill in the art at the time of the present invention.

Regarding claim 7, the APA in view of Story in view of Boede does not disclose the raised projections spaced circumferentially 90 degrees about the housing. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the housing of APA by spacing the projections at 90 degree intervals about the housing since it has been held that the optimization of proportions in a prior art device is a design consideration within the skill of the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961). Regarding claim 12, the APA in view of Story in view of Boede does not disclose the fasteners secured to the housing inner surface by a weld, crimp, or adhesive. However, it would have been obvious to one of ordinary skill in the art at the time of the present invention to have modified the motor mount by substituting a weld, crimp, or adhesive for nuts attached to the fasteners (see fig. 2 of Story) because welds, crimps, adhesives, and nuts are well known for their use in the fastening art and the selection of any of these known equivalents to secure the bolts to the housing surface would be within the level of ordinary skill in the art.

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed September 15, 2005 have been fully considered but they are not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill

Art Unit: 3632

in the art at the time of the present invention to have modified the housing of Fisher by providing a plurality of fasteners circumferentially spaced about the housing and extending outwardly therefrom because one would have been motivated to enable the motor to be attached within an application as taught by the APA. It also would have been obvious to one of ordinary skill in the art at the time of the present invention to have modified the housing of Fisher by providing openings therein and extending the fasteners outwardly through the openings, wherein the fasteners are inherently positioned between interior rotating motor components and the outer surface, as an alternative means for securing the fasteners to the motor as taught by Story because one would have been motivated to prevent accidental "breaking off" of the fasteners.

Finally, it would have been obvious to one of ordinary skill in the art at the time of the present invention to have modified the housing of Fisher by providing raised projections, that extend outwardly from the housing and include openings therein for receipt of the fasteners because one would have been motivated to eliminate a mounting bolt head protrusion above the inner surface of the housing as taught by Boede (col. 4, lines 49-55). Also, the Examiner disagrees that Boede teaches away from Applicant's invention. The thickness of the projections appears to be a matter of design preference and no function or purpose is given for the thickness of the projections appearing to be greater than that of the cover thickness.

Art Unit: 3632

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Marsh whose telephone number is (571) 272-6819. The examiner can normally be reached on Monday-Friday from 8:00AM to 4:30 PM. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3600. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

SM

Steven M. Marsh

April 3, 2006

[REDACTED]

Ramon O. Ramirez
RAMON O. RAMIREZ
PRIMARY EXAMINER